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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/530,317	01/19/2006	Tatsuhito Goden	1232-5642	3635

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EXAMINER	
HOLTON, STEVEN E	

ART UNIT	PAPER NUMBER
2629	

NOTIFICATION DATE	DELIVERY MODE
01/10/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/530,317	Applicant(s) GODEN, TATSUHIITO	
	Examiner Steven E. Holton	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-7 is/are rejected.
- 7) ☒ Claim(s) 2 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 1 is objected to because of the following informalities:

Regarding claim 1, line 12, 'electrophoretic particle' should be 'electrophoretic particles'

Claim 1, line 19, the phrase 'attracted toward' is incomplete and lacks information regarding what the particles are attracted toward. The Examiner assumes it is the second electrode.

Claim 5, line 11, 'electrophoretic particle' should be 'electrophoretic particles'

Claim 5, line 19, the phrase 'attracted toward' is incomplete and lacks information regarding what the particles are attracted toward. The Examiner assumes it is the second electrode.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 4 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Regarding claim 4, the claim provides the limitation that the first and second electrodes are provided asymmetrically. However, none of the provided electrode layouts are asymmetric. The electrode layouts shown in Figs. 1, 3, 4, and 6 are clearly symmetric along axes parallel to X and Y. The electrode layout of Fig. 5 is symmetric along a diagonal line drawn from the upper left corner to the lower right corner, thus dividing electrode 24a in the middle of the angle. Thus, none of the provided embodiments of the display device use electrodes that are disposed asymmetrically. Further this is no discussion within the specification regarding providing asymmetrically disposed electrodes within the display device. Therefore, claim 4 is rejected as being non-enabled by the provided specification.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 3 and 5-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Machida et al. (USPN: 6753844), hereinafter Machida.

Regarding claims 1 and 5, which are drawn to a display device and an associated method of operation, Machida discloses an electrophoretic display with a

plurality of electrophoretic particles (Fig. 1, 22 and 24) and an insulating liquid (col.3, lines 61-62; insulating particles within the space between electrodes would have to be a liquid form; a solid form would prohibit the charged particles from moving), a first electrode (Fig. 1, element 28) and a second electrode (Fig. 1, element 34) disposed close to the insulating liquid and means for applying voltages to between the first and second electrode (Fig. 1, element 14), wherein said electrophoretic display device exhibits a display state including a first state in which said electrophoretic particle are dispersed in said insulating liquid by applying an AC voltage between said first and second electrodes (Fig. 9, initializing drive time), a second state in which said electrophoretic particles are attracted toward said first electrode by applying a DC voltage of one polarity between said first and second electrodes (Fig. 9, Displaying White time), and a third state in which said electrophoretic particles are attracted toward by applying a DC voltage of the other polarity between said first and second electrodes (Fig. 9, Displaying Black time), wherein the second and third states are exhibited alternately (Fig. 9, Displaying White and Display Black signals are alternating)." The Examiner notes that by changing the display from black to white depending on the images shown the second and third driving states of the display described by Machida would be exhibited alternately.

Regarding claim 3, Machida discloses the first and second electrodes are disposed symmetrically across the pixel (Fig. 1, elements 28 and 34 are on opposite sides).

Regarding claim 6, Machida discloses performing the first step between the second step and third step (Fig. 9, the Initializing Drive state is performed between Displaying White and Displaying Black).

Regarding claims 7, Machida discloses applying voltages having identical absolute voltages for the second and third states (Fig. 9, Displaying White and Displaying Black use +300V and -300V).

Allowable Subject Matter

4. Claim 2 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Zehner et al. (USPN: 7012600) discloses methods of providing an alternating voltage before providing a DC voltage biased towards one electrode or another electrode during driving. Liang et al. (USPgPub: 2003/0035198) discloses an electrophoretic display using in-plane switching.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven E. Holton whose telephone number is (571) 272-7903. The examiner can normally be reached on M-F 8:30-5.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on (571) 272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Steven E. Holton
Division 2629
January 6, 2008

AMR A. AWAD
SUPERVISORY PATENT EXAMINER
